



# **LOS ALAMOS NATIONAL LABORATORY SECTION 13 ORDER**

**Public Information Meeting**

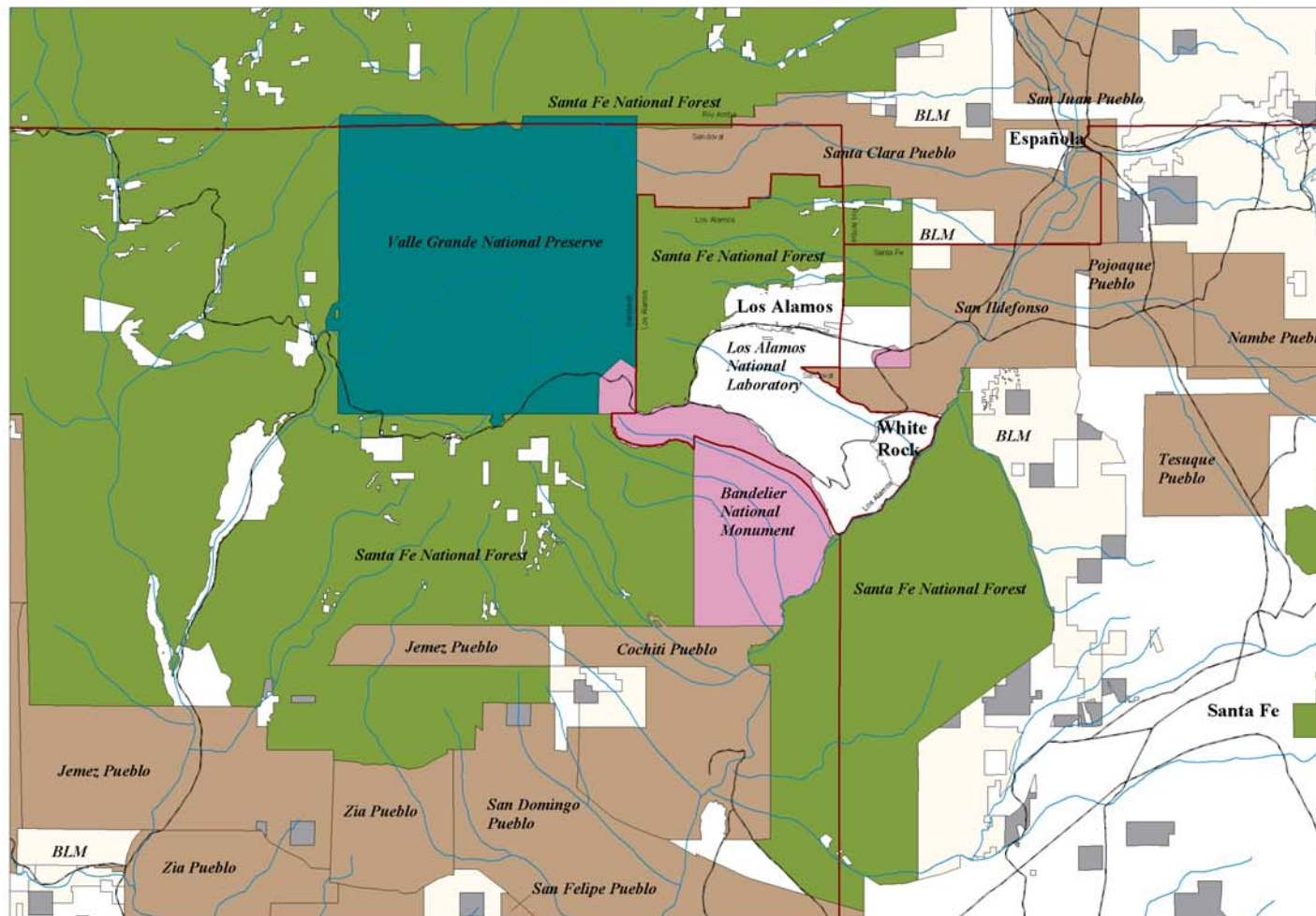
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**New Mexico Environment Department**

# I. BACKGROUND

- LANL has been in operation since 1943.
- Main operations: nuclear and other weapons research and development
- Past operations have generated hazardous and solid wastes that include metals, solvents, high explosives, and radionuclides.

# LANL AND SURROUNDING AREAS



## LEGEND:

- Roads
- Drainages
- County Boundaries
- Bandelier National Monument
- Barkhead-Jones admin by BLM
- Tribal Land
- Los Alamos National Laboratory
- New Mexico State Lands
- Private Land
- Santa Fe National Forest
- BLM
- Valle Grande National Preserve

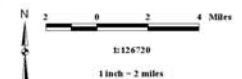
## DATA SOURCES:

Land Use Coverage from GISLab,  
Los Alamos National Laboratory  
All Other Coverages from NMED

## PROJECTION:

New Mexico State Plane Coordinate System  
Central Zone  
North American Datum 1983

Map produced by Kim Granzow, May, 2002  
NMED DOE Oversight Bureau



State of New Mexico  
Environment Department



Hazardous Waste Bureau

## **II. PURPOSE OF THE ORDER**

- Accelerate pace of investigation and cleanup at high priority sites.
- Prioritize investigation and cleanup activities.
- Provide specific requirements and schedules for completion.
- Ensure more stable funding from DOE HQ.

### **III. LEGAL AUTHORITY**

- New Mexico was authorized to administer Resource Conservation and Recovery Act (RCRA) corrective action in 1996.
- New Mexico Hazardous Waste Act
- Imminent and Substantial Endangerment Finding

# **IV. RELATIONSHIP OF THE ORDER TO THE OPERATING PERMIT**

The Order addresses corrective action requirements and procedures as they relate to releases of contamination but does not address LANL hazardous waste management operations.

LANL's Operating Permit is being renewed and will contain corrective action requirements that are expected to parallel those of the Order.

# V. CONTENTS OF THE ORDER

The Order contains:

- specific investigation requirements for high priority sites
- submittal requirements/schedule for ongoing projects
- general characterization requirements for sites not yet addressed under the LANL environmental restoration program
- requirements for stabilization of surface soils and sediment at sites with erosion potential

The Order does NOT contain requirements for:

- waste management
- facility research and development activities
- land use policies regarding facility operations

# VI. ORDER HIGHLIGHTS

## A. Groundwater

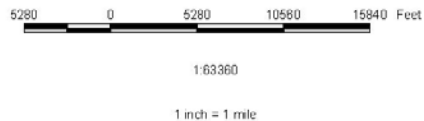
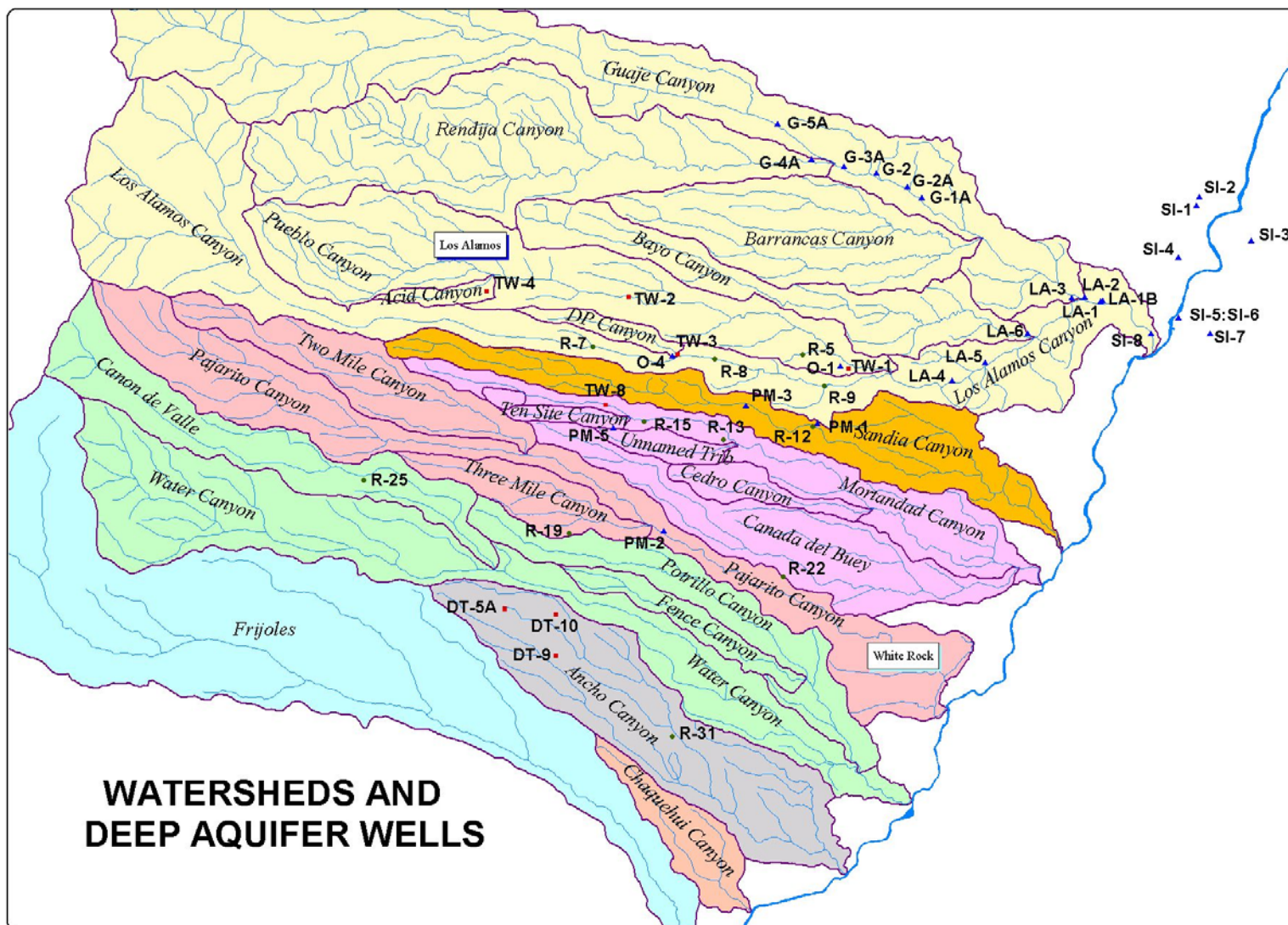
- Hydrogeologic Workplan Implementation
  - Facility-wide groundwater characterization
- Groundwater Contamination Investigations
  - Alluvial groundwater
  - Intermediate groundwater
  - Regional groundwater
- Groundwater Monitoring
  - Interim monitoring
  - Long-term monitoring



# **VI. ORDER HIGHLIGHTS**

## **B. Canyons**

- Sources of contamination
- Subsurface investigations
- Groundwater investigations
- Sediment investigations
- Surface water monitoring



**DATA SOURCES:**  
 GISLab, Los Alamos National Laboratory  
 NMED DOE Oversight Bureau

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# **VI. ORDER HIGHLIGHTS**

## **C. Technical Areas (TAs), Material Disposal Areas (MDAs), Watersheds and Aggregate Areas**

- Defined
- Sources of contamination
- Surface and subsurface investigation
- Groundwater investigation

# LOS ALAMOS NATIONAL LABORATORY



5280 0 5280 10560 15840 Feet

1:63360

1 inch = 1 mile



DATA SOURCES:  
OISLab, Los Alamos National Laboratory  
NMED DOE Oversight Bureau

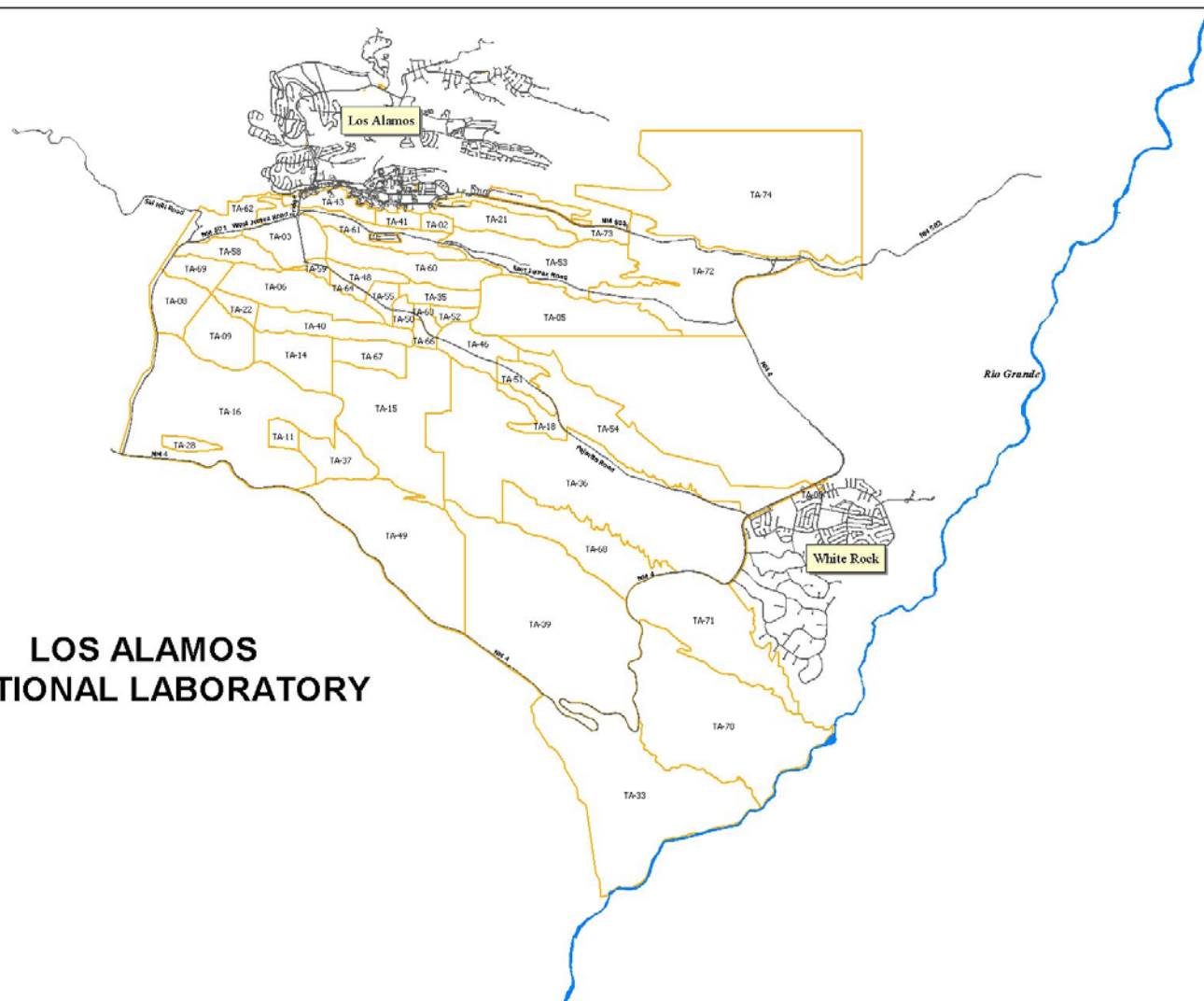
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Map produced by Kim Orenzow, April, 2002  
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# **VI. ORDER HIGHLIGHTS**

## **D. Process**

- **Historical Review**
- **Work Plans**
- **Investigation Reporting**
- **Corrective Measures Evaluation**
  - **Cleanup Alternatives**
- **Corrective Measures Implementation**
  - **Cleanup Actions**
  - **Long-term Monitoring**

# **VI. ORDER HIGHLIGHTS**

## **E. Cleanup Levels**

- **Risk Levels (Human Health and Ecological Risk)**
- **NMED Soil Screening Guidance (1:100,000)**
- **Groundwater Cleanup Levels**
  - New Mexico standards [WQCC]
  - Federal levels [MCLs]
  - EPA Region VI Screening guidelines [tap water]
- **Surface Water Cleanup Levels**
  - New Mexico Standards [WQCC]
  - Inter- and intrastate surface water standards
  - Clean Water Act
- **Risk assessment based on technical infeasibility**

# **VI. ORDER HIGHLIGHTS**

## **F. Methodology**

- **Field investigation and sample collection methods**
- **Sample handling and laboratory analyses**
- **Drilling methods and well construction**
- **Reporting requirements**

# **VI. ORDER HIGHLIGHTS**

## **G. Schedule**

- **High Priority Sites**
- **Canyons**
- **Aggregate Areas**
- **Ongoing Investigations**
- **Groundwater Investigation and Monitoring**



# **VI. ORDER HIGHLIGHTS**

## **H. Public Participation**

- **Public comment on the Order**
- **Public comment on the Draft Operating Permit**
- **Corrective Measures Selection**
- **Completion of Site Cleanup (No Further Action Determination Permit Modification Process)**